

# INTERNATIONAL SEARCH REPORT

International Application No  
PC17/EP2004/013252

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N9/88 C12N1/20 C12P13/02 C12R1/01

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12P C12R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>EP 0 362 829 A (YAMADA, HIDEAKI; NITTO KAGAKU KOGYO KABUSHIKI KAISHA) 11 April 1990 (1990-04-11) cited in the application abstract page 5, line 12 - line 26 page 5, line 46 - line 56; claims 1,3,4; examples 1-e; tables 1,2</p> <p style="text-align: center;">----- -/-</p>	1-31

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*8\* document member of the same patent family

Date of the actual completion of the international search

3 February 2005

Date of mailing of the international search report

17/02/2005

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>PRECIGOU S ET AL: "Rapid and specific identification of nitrile hydratase (NHase)-encoding genes in soil samples by polymerase chain reaction" FEMS MICROBIOLOGY LETTERS, AMSTERDAM, NL, vol. 204, no. 1, 2001, pages 155-161, XP002248648 ISSN: 0378-1097 abstract page 160, column 2, paragraph 1; figures 1,3,4; tables 1,2</p>	1-31
Y	<p>WATANABE I ET AL: "SCREENING, ISOLATION AND TAXONOMICAL PROPERTIES OF MICROORGANISMS HAVING ACRYLONITRIL-HYDRATING ACTIVITY" AGRICULTURAL AND BIOLOGICAL CHEMISTRY, JAPAN SOC. FOR BIOSCIENCE, BIOTECHNOLOGY AND AGROCHEM. TOKYO, JP, vol. 51, no. 12, 1987, pages 3193-3199, XP001062886 ISSN: 0002-1369 abstract page 3195, column 1, paragraph 2; tables 1,3,4</p>	1-31
Y	<p>US 3 281 247 A (MIESCHER GUIDO M) 25 October 1966 (1966-10-25) column 2, line 18 - line 37 examples 1,2</p>	13-31
A	<p>US 5 827 699 A (YANENKO ET AL) 27 October 1998 (1998-10-27) cited in the application column 1, line 39 - line 63 column 4, line 20 - line 59; claim 4</p>	1-31
A	<p>KOBAYASHI M ET AL: "CLONING, NUCLEOTIDE SEQUENCE AND EXPRESSION OF ESCHERICHIA COLI OF TWO COBALT-CONTAINING NITRILE HYDRATASE GENES FROM RHODOCOCCUS RHODOCHROUS J1" BIOCHIMICA ET BIOPHYSICA ACTA . GENE STRUCTURE AND EXPRESSION, ELSEVIER, AMSTERDAM, NL, vol. 1129, no. 1, 2 December 1991 (1991-12-02), pages 23-33, XP000653047 ISSN: 0167-4781 abstract page 32, column 1, paragraph 1</p>	1-31
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PCT/EP2004/013252

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>IKEHATA O ET AL: "PRIMARY STRUCTURE OF NITRILE HYDRATASE DEDUCED FROM THE NUCLEOTIDE SEQUENCE OF A RHODOCOCCLUS-SP AND ITS EXPRESSION IN ESCHERICHIA-COLI" EUROPEAN JOURNAL OF BIOCHEMISTRY, BERLIN, DE, vol. 181, no. 3, 1989, pages 563-570, XP009033346 ISSN: 0014-2956</p>	
A	<p>INGVORSEN K ET AL: "MICROBIAL HYDROLYSIS OF ORGANIC NITRILES AND AMIDES" CIBA FOUNDATION SYMPOSIUM, AMSTERDAM, NL, vol. 140, 1988, pages 16-31, XP000881167 ISSN: 0300-5208</p>	

## INTERNATIONAL SEARCH REPORT

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### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12, 24-31 (complete); 13-23 (partially)

Invention 1 concerns the micororganism *Rhodococcus* rhodochrous strain NCIMB 41164 and the subject-matter relating thereto.

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2. claims: 13-23 (partially)

Invention 2 concerns a method for improving the biocatalytic activity of a microorganism and the subject-matter relating thereto, as far as not covered by Invention 1.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/013252

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0362829	A	11-04-1990	JP 2029079 C	19-03-1996
			JP 2227069 A	10-09-1990
			JP 7053104 B	07-06-1995
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			CZ 8905621 A3	16-02-1994
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			DE 1492868 A1	15-01-1970
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			GB 1078038 A	02-08-1967
			NL 6413933 A	17-06-1965
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			DE 4480132 T0	09-05-1996
			FI 953865 A	12-09-1995
			GB 2290295 A ,B	20-12-1995
			KR 131276 B1	11-04-1998
			WO 9517505 A1	29-06-1995